

## **SPRINKLER SYSTEM**

### **ABSTRACT**

A rotary sprinkler having a rotatable nozzle assembly for watering an arc of ground traversed or swept by the nozzle assembly as the nozzle assembly rotates is disclosed. Oscillating rotation is achieved via a drive train that includes a trip spring that is drivable between first and second positions for reversing the direction of nozzle rotation. The sprinkler also includes: a variable trajectory nozzle; secondary opening adjacent the variable trajectory nozzle; an automatic break up screw configuration; a substantially constant speed turbine assembly; a bypass stator; a reversing cluster gear planetary drive with a uni-directional turbine; an overcenter reversing mechanism; a nozzle base clutch; an adjustable arc mechanism, solid arc limit stops, a snap ring installation method and an adjustable pilot valve which uses visual indicia.